

Desertification

Definition: type of land degradation in which relatively dry land region becomes increasingly arid, typically losing its bodies of water as well as vegetation and wildlife.

The main cause of desertification in loss is vegetation. Vegetation plays an important role in determining the biological composition of the soil. Unprotected, dry soils are blown away from the wind or washed by flash floods. This leaves infertile soil that bakes in the sun without protection.

Large movements of migration with livestock's and wildlife have a large role the preservation of vegetation and soil fertilization.

3 Main Points

1. Health of Humans
2. Impact on Environment
3. How to Prevent Desertification

1. Health on Humans

Environmental processes are putting stress on the world's lands and pastures important for the provision of food, water and air quality.

Potential Impacts of Desertification on Human Health:

- Higher threats to malnutrition from reduced food and water supplies
- More water and food diseases that result from poor hygiene and a lack of clean water
- Respiratory diseases caused by atmospheric dust from wind erosion and other air pollutants
- The spread of infectious diseases as population migrates

Example: Africa

Threatened because the land degradation processes affect about 46 percent of the whole continent. This causes health risks to people living in the regions far beyond the affected areas.

Dry lands depend on ecosystem services for their basic needs. This means they are dependent on water availability and climate change. The extent of the health impact depends on a complicated mix of factors. Those include a population's vulnerability and on pre-existing conditions made up of age, gender, disability, genetics, immune status, and access to health services.

Desertification and droughts are directly linked to food and water shortage, conflicts, mass migrations, increased risk of fires and limited access to health care. It also leads to shrinkage in wild plants that provide nutritional supplements for entire communities living in deserts. The changes in biodiversity add a risk to traditional medicine, which relies on wild plants. Thus, creating a problem in areas where modern medicines are out of reach.

Health Impacts:

1. Malnutrition and Famine
Effects: Growth and development retardation, susceptibility to infections blindness and anemia
2. Water Borne Disease
Effects: Fecal-oral disease and water-wash disease which spreads from one person to another
3. Infectious Diseases, Respiratory Diseases and Burning Injuries
Effects:

Decrease in income levels and declining agricultural productivity are linked to desertification. This leads to severe economic crisis and poverty.

<http://www.who.int/globalchange/ecosystems/desert/en/>
http://worldinfo.org/wp-content/uploads/library/wer/english/2009_Spring_Vol_XXI_no_1.pdf

Ways to Prevent Desertification

- To prevent desertification we can plant more trees and try new farmer methods to try and prevent it
- We can integrate land and water management to try to prevent salinization, erosion, and other forms of degradation.
- Another thing we can do is protect the vegetation throughout the world.
- Integrate grazing land and farming land when conditions are favorable. This allows for a much more efficient cycling of nutrients in the soil.
- Educate people that live in areas that could be affected by desertification

Affects on the environment

- Loss of soil service due to wind and rain erosion leading to infertile soil

- Landslides occur especially after heavy rain because the roots hold all the salts together
- Soil becomes less usable because it gets blown away, when it gets blown away the nutrition in the soil.
- Loose soil may be blown and cover plants and kill the plants
- This affects farmers because the weather is too hot and it kills all of their crops any one that lives in the area because they have to move because they can not eat anymore and they need to find an area with grass and where they can farm.
- Loss of habitat to wild animals because they loose all their grass and water and this forces people and animals to migrate and find more food/ causes starvation.

<http://desertificationb.tripod.com/id1.html>

<http://www.greenfacts.org/en/desertification/1-2/6-prevention-desertification.htm>